Log Formats & Normalization

Recognizing common camera log formats and their native gamuts, plus the Color Space Transform / Resolve Color Management recipe to normalize them.

> Log footage looks flat, grey and milky — low contrast, lifted blacks, muted color. That's not a defect; the camera is storing a huge brightness range so *you* decide how to use it. Don't grade it by eye or slap a creative LUT on top — normalize first.

Common log formats & gamuts

MANUFACTURER	LOG FORMAT	NATIVE GAMUT	NOTES
Sony	S-Log3	S-Gamut3 / S-Gamut3.Cine	.Cine variant frames closer to Rec.709/DCI for easier grading
ARRI	LogC3	ARRI Wide Gamut (AWG)	Classic Alexa family
ARRI	LogC4	ARRI Wide Gamut 4 (AWG4)	Alexa 35 and newer sensors
Canon	Canon Log 2 / Canon Log 3	Cinema Gamut	Log 3 = easier to grade, lower range; Log 2 = maximum range
Panasonic	V-Log	V-Gamut	GH/S-series, VariCam
Blackmagic	Blackmagic Film (BRAW)	Blackmagic Design Wide Gamut	Baked into .braw, adjustable in-app (ISO, WB, tint)
RED	Log3G10	REDWideGamutRGB	Part of the IPP2 image pipeline
Nikon	N-Log	Rec.2020 (typical)	Z-series mirrorless

You don't need to memorize this table — you need to recognize the flat, milky *look* and know where to find the matching input setting when you do normalize.

Normalization recipe

Recipe A — Color Space Transform (per clip)

1. Confirm the clip looks flat/grey — that's the tell.
2. Add a serial node as your **first** node. Label it *Normalize*.
3. Add the **Color Space Transform** OFX to that node.
4. Set **Input Color Space** + **Input Gamma** to the camera's log/gamut (table above).
5. Set **Output** to **Rec.709 / Gamma 2.4**.
6. Check the waveform: blacks near the floor, whites near the top, nothing slammed.
7. Grade on the nodes *after* Normalize.

Recipe B — Resolve Color Management (set once)

1. *Project Settings → Color Management*.
2. Color Science: **DaVinci YRGB Color Managed**.
3. Output color space: **Rec.709 Gamma 2.4**.
4. Tag each clip: right-click the clip → **Input Color Space** (use the table above).
5. Every tagged clip normalizes automatically, project-wide.

The cardinal rule: a conversion is not a look. **Normalize first** (CST node or RCM) → **grade second** (primaries, Lesson 1.3) → a **creative LUT** last, if at all, applied *after* normalization — never onto raw log.